



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,586	01/03/2006	Ayla Kuran	PHDL0860-005	3542
26948 7590 08/24/2009 VENABLE, CAMPILLO, LOGAN & MEANEY, P.C. 1938 E. OSBORN RD PHOENIX, AZ 85016-7234				
EXAMINER CAMPBELL, NATASHA N.				
ART UNIT		PAPER NUMBER		
1792				
NOTIFICATION DATE		DELIVERY MODE		
08/24/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@vclmlaw.com

Office Action Summary

Application No.

10/540,586

Applicant(s)

KURAN ET AL.

Examiner

NATASHA CAMPBELL

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 4-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-8 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/003)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1, 2, 4-10 are currently pending.
2. The rejection of Claims 1-3 under 35 USC 112 is withdrawn in view of Applicant's amendments.
3. The rejection of Claims 1-3 under 35 U.S.C. 102 is withdrawn in view of applicant's arguments and amendments.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 1, 7, and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Regarding Claim 1: The claim includes an amended recitation of "a microprocessor which detects microorganism in the washing water". However, in light of applicant's disclosure, it is understood that the biosensor detects the microorganisms, not the microprocessor.
7. Regarding Claims 7 and 8: The claims recite the limitation "if the microbiologic pollution rate cannot be lowered to the required level by the changes in temperature and/or period". However, it is not clear what prior steps are performed to lower the pollution rate.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothgeb et al. (US 2003/0227394), and further in view of Kafferlein et al. (DE 4415823).

12. Regarding Claim 1: Rothgeb teaches a biosensor for use in a dishwasher for detecting microorganisms in water (see abstract, and page 9, [0008]). He teaches that the biosensor comprises a memory which is fully capable of loading parameters to be compared (page 7, [0091-0092]), and a microprocessor (p. 8, [0102]) fully capable of comparing signals from the biosensor with the loaded parameters. He further teaches that the apparatus further comprises a control unit (p. 7, [0094]).

13. Although Rothgeb does not specifically teach that the dishwasher comprises a wash tub and sump, these features are conventional, and well known within the art. He does not teach that the control unit arranges a washing program with respect to the data obtained. He does not teach that the memory comprises preloaded maximum biologic pollution rates.

14. Kafferlein teaches a dishwasher with a biosensor (machine translation, para. 16) that send a control signal to adjust the wash cycle process according to the degree of contamination detected by the biosensor (see abstract and para. 3).

15. Therefore, one of ordinary skill in the art at the time of the invention would have been motivated to modify the device of Rothgeb by providing a control unit configured to arrange the washing program with respect to the information obtained by the biosensor, as taught by Kafferlein, in order to enhance the efficiency of the dishwasher. Further, it would have been obvious to preload the memory with maximum pollution rates to provide a standard to which the detected contamination could be measured.

16. Regarding Claim 2: Rothgeb teaches that the sensor is wireless and self contained, allowing it to be freely positioned in the surrounding environment (page 3,

[0050]). It is therefore fully capable of being placed in a measurement chamber. The dishwasher itself is considered to be the measurement chamber and, as such, is fully capable of taking as much sample as required for measurement.

17. Regarding Claims 4-6: Rothgeb and Kafferlein teach the elements of 1, as described above. As previously stated, Rothgeb teaches that the device comprises a memory with data storage features (page 5, [0067]). It is, therefore, fully capable of storing preloaded values such as temperatures and circulation periods (see [0067]).

18. Rothgeb does not teach that these values are applied in the washing cycle based on results of comparing the detected values with the limit values.

19. However, as previously stated, Kafferlein teaches a dishwasher equipped with a biosensor that sends a control signal to adjust a wash cycle based on the degree of contamination detected. He teaches that depending on the contamination, the temperature or the circulation periods are adjusted (see abstract). Therefore, in light of Kafferlein's disclosure, one of ordinary skill would have been motivated to modify the device of Rothgeb to configure the memory to store and apply the temperature and circulation periods as claimed in order to enhance the cleaning efficiency.

20. Regarding Claims 7 and 8: Rothgeb and Kafferlein teach the elements of Claim 6, as described above. Rothgeb does not teach a control Method in which the washing water is sterilized.

21. Kafferlein teaches that upon detection of contaminants, the washing water is heated or completely replaced depending on the degree and type of contamination (see para. 15).

22. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Rothgeb to sterilize the washing water if the contamination is at an unacceptable limit, as suggested by Kafferlein, in order to produce clean and safe washing water for cleaning the articles in the dishwasher.

Allowable Subject Matter

23. Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

24. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art of record is that of Rothgeb et al. (US 2003/0227394) and Kafferlein et al. (DE 4415823).

25. Rothgeb teaches a biosensor that is positioned in a dishwasher to detect biological activity (see abstract and [0051]). Kafferlein teaches a biosensor placed in a dishwasher for detecting biological contamination, and further teaches that a control signal is sent to adjust the washing cycle based on the degree and type of contamination detected by the biosensor.

26. Although the combination of Rothgeb and Kafferlein teach the elements of the dishwasher presented in the independent Claim 1, neither reference discloses or fairly suggests the detailed control method comprising the steps for the washing program as presented in Claims 9 and 10.

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

28. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **NATASHA CAMPBELL** whose telephone number is (571)270-7382. The examiner can normally be reached on Monday-Friday; 8 AM-4 PM.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Kornakov can be reached on (571) 272-1303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1792

31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/nnc/

Examiner, Art Unit 1792

17 August 2009

/Michael Kornakov/

Supervisory Patent Examiner, Art Unit 1792